

In the Claims

1. (Currently Amended) A method of sealing a glass panel assembly by melting a seal frit which is applied between two mutually overlaid glass substrates, comprising[[],]:

a preliminary heat process where [[a]]temperature of ~~said~~the glass panel assembly is increased to a preliminary temperature within a forced flow of a heating medium, ~~said~~the preliminary temperature being lower than a temperature at which ~~said~~the seal frit begins to melt,

a pressure reduction process where [[a]]pressure surrounding ~~said~~the glass panel assembly is reduced while ~~said~~the preliminary temperature is maintained,

a sealing process where [[a]]temperature of ~~said~~the glass panel assembly is raised from ~~said~~the preliminary temperature to a sealing process temperature within a forced flow of a heating medium, and

a cooling process where ~~said~~the glass panel assembly is cooled within a forced flow of a cooling medium.

2. (Currently Amended) A glass panel assembly sealing process furnace incorporating a transport mechanism as means of transporting a glass panel assembly therethrough and melting a seal frit which is applied between two mutually overlaid glass substrates of ~~said~~the glass panel assembly, comprising[[],]:

a preliminary heating ~~part~~portion, a pressure reduction ~~part~~portion, a sealing treatment ~~part~~portion and a cooling ~~part~~portion sequentially disposed along a transport direction of ~~said~~the glass panel assembly by ~~said~~the transport mechanism, and

pressure adjustment ~~parts, which are~~portions capable of increasing and decreasing pressure, installed between ~~said~~the preliminary heating ~~part~~portion and ~~said~~the pressure reduction ~~part~~portion,

and also between saidportion pressure reduction partportion and saidthe sealing treatment partportion, wherein[[],]

saidthe preliminary heating partportion heats saidthe glass panel assembly [[by]]with a forced flow of a heating medium to a preliminary temperature, saidthe preliminary temperature being lower than a temperature at which saidthe seal frit begins to melt,

saidthe pressure reduction partportion decreases [[a]]pressure surrounding saidthe glass panel assembly and maintains saidthe preliminary temperature,

saidthe sealing treatment partportion heats saidthe glass panel assembly [[by]]with a forced flow of a heating medium to a sealing process temperature from saidthe preliminary temperature, and

saidthe cooling partportion cools saidthe glass panel assembly [[by]]with a forced flow of a cooling medium.